International Telecommunication Union



Radiocommunication Bureau

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To Administrations of Member States of the ITU and Radiocommunication Sector Members

Subject: 1999 Operational Plan for the ITU-R Sector

Reference: Administrative Circular CA/58 of 21 December 1998

Please find enclosed the definitive version of the 1999 Operational Plan for the ITU-R Sector. A draft of this plan was submitted to the Radiocommunication Advisory Group (RAG) at its 7th regular meeting held in Geneva from 22 to 26 February 1999 and the advice received from the RAG has been incorporated into this final version.

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Enclosure: 1999 Operational Plan

Distribution:

- Administrations of Member States of the ITU
- Radiocommunication Sector Members
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and the Special Committee on Regulatory/Procedural Matters
- Chairman and Vice-Chairmen of the Radiocommunication Advisory Group
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

1999 OPERATIONAL PLAN OF THE RADIOCOMMUNICATION SECTOR

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1 Introduction

1.1 General

This Operational Plan flows from the strategic plan as adopted by the Kyoto Plenipotentiary Conference in its Resolution 1 and sets out results to be achieved in 1999. These results will be obtained by implementing a certain number of activities in the Radiocommunication Bureau (BR) which fall into two categories: Recurrent ongoing work and special projects or studies having a fixed duration. This document will be used as the basis for the effective management of the Bureau's activities. The progress of the work to be carried out in the various units of the BR is assessed by means of quarterly reports in which the situation at the end of each quarter is compared to the results to be achieved. Such assessment shall be facilitated by the introduction of key performance indicators which will focus on members' needs taking into consideration, on the one hand, the workload placed on the BR, and on the other hand, the resources available as decided by the ITU Council.

In this respect, the 1998 session of the Council took important decisions as far as BR resources are concerned in particular in the field of work to be carried out following instructions given by WRC-97 including the preparation of WRC-2000. Thus, during year 1999, the BR will concentrate on the efficient use of such additional resources in order to achieve significant results for:

- the reduction of the processing delays for coordination requests, Art. S9 (S9.30);
- the elimination of backlog, Art. 13, and S11.28 and S11.29, AP30B resulting work;
- the implementation of Resolution 532, review of AP30/30A;
- the implementation of decisions relating to APS30/S30A;
- the measures to solve incompatibility between BSS (Region 1) and FSS (Region 3);
- the implementation of the Administrative Due Diligence concept.

Also, considering the significant additional impact of post-WRC and WRC preparatory work on the ITU-R Study Groups work program, the BR secretariat will place special emphasis on the support to Radiocommunication Study Groups.

1.2 Structure and presentation of the 1999 Operational Plan

This operational plan focuses on products and services for which the BR management shall assign appropriate resources in order to absorb, as far as practicable, the related workload. As already mentioned in point 1 above, these products and services are generated by recurrent (regular) activities or by special projects or studies with a defined deadline. Compared with past operational plans, this new presentation is more customer (members) oriented and seeks to improve BR's efficiency in providing the quality of service required by all members. The proposed new BR operational plan is not structured along the lines of the BR organization chart. Rather, BR key products and services are organized by topics, e.g. ITU-R Recommendations.

For each key product/service the operational plan shows:

- 1) the main results to be achieved;
- 2) the estimated workload including backlog (if any) during the concerned year;
- 3) planned resources allocated to the concerned activity;
- 4) proposals for key performance indicator(s).

1.3 Proposed Key Performance Indicators (KPIs)

The proposed KPIs, instead of being workload oriented, shall give a clear indication of achieved results as expected by members concerning the quality of products and services and, in particular, on deadlines. For instance, as far as performance is concerned, it is proposed to concentrate more on the "meantime required to process a notice" than on the "number of notices received in the BR during a certain period". Also, in the work of the Study Groups, it is proposed to measure performance on the basis of "time required to publish a Recommendation after approval" instead of the "number of pages of Recommendations".

1.4 Resources of the Radiocommunication Sector in 1999 (Direct costs)

The 1998-1999 biennial budget of the Radiocommunication Sector has been approved by the 1997 session of the Council in its Resolution 1100 and further revised by the 1998 session of the Council in its Resolution 1121. The amount of CHF 2,300,000, corresponding to the budget previously allocated to RA/WRC-99, will be transferred to the reserve account due to the fact that the next RA/WRC will be organized during the 2000-2001 biennium. The overall biennial budget of the Sector is about CHF 62,935,000 or 19% of the total ITU regular budget. Subject to confirmation after the closure of the 1998 accounts, the cost of activities carried out in the Radiocommunication Sector in 1998 is estimated at CHF 28,852,000 and, consequently, the ITU-R budget available in 1999 would be about CHF 34,083,000.

These resources, administered by the Director of the BR to support the activities of the Radiocommunication Sector, are of three types: resources directly allocated by Council in the budget to specific activities of the Sector (RRB, RAG, Study Groups, seminars), resources allocated to the Radiocommunication Bureau to support its activities and resources allocated to the production of publications. (See paragraph 12 for more details.)

The maximum amount of human resources expected to be available in the Radiocommunication Bureau, in 1999, would be as follows:

- Professional staff: 860 staff-months, corresponding to 86 P-staff/D-staff.
- General services staff: 1070 staff-months, corresponding to 107 G-staff.

In this context, a "staff month" is understood to comprise 20 working days and a staff member should be able to perform 10 staff months in 1999 on assigned tasks, leaving the rest of the work days for leave, sick leave, management, training, etc.

2 Space Services

2.1 Advance publication of information pertaining to satellite networks

This part of space services activities comprises:

- examination, validation and publication of the information received on satellite networks submitted under Article S9, subsection 1A and 1B in accordance with No S9.2B;
- preparation of special sections and their publication;
- publication of the request for modification/extension of the date of bringing into use in MOD API which involves for each request:
 - 1) Examine the request for extension based on the relevant provisions of the RR and associated Rules of Procedure;
 - 2) Publish an API MOD;

- 3) Publication of date of receipt of the API in order to establish the maximum allowed regulatory period;
- the development and maintenance of divisional databases and the maintenance of archives.

API requests remaining, for processing on 1 January 1999 will be around 420. Taking into account last years statistics, around 619 new cases are expected to be received within 12 months or 464 within 9 months, considering the 3 months for publication under S9.2B. The total number of APIs to be published in 1999 would then be 884, requiring a publication rate of 17.3 APIs per week. The current rate of processing in the BR is 13.7 APIs per week.

From 1.1.98 to 22.9.98, modifications of the date of bringing into use concerning 786 networks were received; API examination and publication were completed for 430 networks.

The resources allocated to this part of space services activities will be about 11 professional and 30 general service staff-months.

Key Performance Indicator: On the assumption that the number of APIs received in 1999 follows the 1998 trend, and that the allocated resources for 1999 could be maintained as indicated above, then the goal to publish APIs within the 3 months period mentioned in No. S9.2B might be reached by the end of 1999. This goal requires a 25% improvement in the average 1998 productivity rate of staff involved in this task, which should be possible in view of the automated API publication process implemented during 1998. Also, on the assumption that the allocated resources for 1999 could be maintained as indicated above, then the goal to publish the date of bringing into use of a modification within 1 month from the date of receipt might be reached by mid 1999.

2.2 Coordination requests pertaining to satellite networks

This part of space services activities consists of:

- data capture, data completion and data validation of incoming coordination requests;
- regulatory and technical examination of the coordination requests;
- publication of the requests in the special sections with findings and with a list of the identified administrations, at the group level/network level, whose services might be affected;
- development and maintenance of divisional databases and the maintenance of archives.

Some 875 cases are currently awaiting data capture and data validation. Based on the rate of receipt of information for Advance Publication over the past 12 months, at least 500 cases are expected to be received in 1999. This may well change; for example, the number of cases received in 1998 was 85% more than that received in 1997. Some 800 cases of changes of date of bringing into use also have to be processed and included in the SRS data base.

Registration, data validation and data capture pertaining to coordination requests (in SPR Division) can proceed at a rate of 30 to 40 cases per month. This implies that, at the end of 1999, a backlog of some 900 to 1000 cases will remain for processing. The rate depends, in particular, on the complexity of the cases received and on the quality of the notices submitted.

The rate of processing in SSC is 32 to 38 networks / month. With the assumption that the input and processing rates will remain the same and taking into account the new software available for examination, the processing time in SSC can most likely be reduced during the specified period.

The resources allocated for capture and validation will be of about 22 professional and 140 general service staff-months and for the examination process about 60 professional and 20 general service staff-months.

Key Performance Indicator: A rate of 35 cases per month for data capture and data validation is envisaged. At the end of 1999, the processing time in SSC will be reduced to eight weeks (not taking into account the waiting periods of approximately 4 months owing to internal and administration delays).

2.3 Modifications to frequency assignment Plans and conversion of allotment Plan

2.3.1 Modifications to frequency assignments of the Appendices S30/S30A Plans

The respective activities comprise the publication of modifications to the Appendices S30/S30A (BSS and Feeder-link) Plans, submitted under Article 4 of the above-mentioned Appendices by administrations, in Part A of a special section and publication of Part B where applicable. In order to process the modifications to the Plans under Article 4 of Appendices S30 and S30A, the following actions are required:

- 1) Completeness check of Annex 2 data of Appendices S30 and S30A.
- 2) Exchange of numerous correspondences between the Bureau and responsible Administration(s).
- 3) Technical examinations under the provisions of Article 4 of Appendices S30 and S30A.
- 4) Preparation of documents for approval of the Weekly Circular Meeting and draft Special Section.
- 5) Coordination for translation of the prepared Special Section into three languages and reading the proofs.
- 6) Technical assistance to administrations.

The total number of networks and number of networks envisaged to be treated until the end of 1999 is given in the following table:

	AP	S30	AP S	330A
	Total networks	Plan for publication	Total networks	Plan for publication
Res. 533	10	10	17	17
Pending Article 4 networks	142	60	152	66
Forecast to be received during 1999	41		43	
Total	193	70	212	83
%		36.3 %		39.2 %

The resources allocated to this part of space services activities will be of about 46 professional and 34 general service staff-months, including some new staff expected to be able to work from 1 August 1999.

Key Performance Indicator: The processing time limit (from the date of receipt to the date of publication) will be 5.5 months, composed of 30 days processing time by the Bureau, 45 days deadline for completeness, 15 days for each correspondence(average additional correspondences up to six).

2.3.2 Processing of submissions received by the Bureau under the allotment Plan contained in Appendix 30B

The respective activities include:

- 1) establishment of the working folder and acknowledgement of receipt;
- 2) completeness check of the submitted data and regulatory examination;
- 3) drafting the correspondence to the notifying administration (if applicable) on the results of examination;
- 4) data capture, creation of the input file and the MSPACE program run;
- 5) analysis of the calculation results, drafting of the correspondence to administration(s) or internal Bureau 's documents or special sections depending on the case;
- 6) updating of the reference situation (if applicable) and posting it on TIES.

The workload for App. 30B is 32 networks (24 received during 1996-1998 and 8 expected in 1999).

Ten professional staff months will be allocated to this task, together with the necessary general service staff resources allocated as required on a case by case basis.

Key Performance Indicator: It is expected that 20 networks will be treated during 1999. However, taking into account a 30 day- "period of adjustment" of technical characteristics introduced in the new Rules of Procedure this number may need to be reduced to 16.

2.4 Notifications for recording in the Master Register

These activities comprise:

- capture, validation and registration of incoming notices;
- regulatory and technical examination (if applicable) of notified cases under Article 13/S11;
- preparation of the finding documents for the weekly circular meetings;
- preparation of the documents on the results of examination, with the use of a simple program which is only able to handle simple cases. In complicated cases, a great deal of manual work is still involved in preparing reports on the results of examination.

This also includes the timely processing of cases still requiring action under the old RR1550 and RES4. Depending on the stage of the relevant procedures, this may be necessary prior to notification, during notification or after provisional recording. The number of cases to be reviewed and processed is increasing.

Over 400 cases are currently awaiting capture treatment. Despite an exceptionally low rate of receipt of notifications in 1998, 300 cases are expected to be received in 1999, based on the rate of receipt of information concerning coordination requests over the past 12 months. This figure of 300 may well change; it will depend on the speed at which coordination requests already received and processed "convert" into space and earth station notifications.

For the examination process (coming from capture and validation), the workload in 1999 is expected to be 444 space stations (308 received during 1995-1997 and 136 expected in 1999). In addition, there may be 554 earth stations (373 received during 1995-1997 and 181 expected in 1999)

The resources allocated for capture and validation comprise about 20 professional and 37 general service staff months.

Registration, validation and capture of data pertaining to notifications (in SPR Division) can proceed at a rate of 24 to 30 cases per month. This implies that, at the end of 1999, a backlog of some 350 to 400 cases will remain for treatment. The rate depends, in particular, on the complexity of the cases received and on the quality of the notices submitted.

Key Performance Indicator: Some 108 space stations and 135 earth stations will be treated in 1999. It is noted that at this rate, the backlog will not be absorbed. At the end of 1999, it is expected that a backlog of 336 space stations and 419 earth stations will remain.

2.5 Due diligence

For networks in the Fixed-satellite service, Mobile satellite service and Broadcasting satellite service, the due diligence information needs to be published in the special section within 30 days from the date of receipt. This includes:

- the capture and validation of the due diligence data;
- sending RES49 reminders, 6 months prior to the planned date of bringing into use of satellite networks;
- examining the due diligence information for completeness, reference to special section numbers, associated frequency range;
- consulting administrations, should any clarification be required.

The related 1999 workload forecast concerning due diligence publication is around 600 networks with date of bringing into use prior to 1.7.98, and around 100 networks with a date of bringing into use prior to 1.12.99.

There are 2 networks under APS30 and APS30A Plans and 3 modifications to the Plans for which the 8 years time limit will expire before the end of 1999, which are to be treated in accordance with RES49.

Some 800 cases of changes of date of bringing into use also have to be processed and included in the SRS data base. These are associated with the treatment of due diligence information as is the information directly provided in accordance with Resolution 49.

Since this is a new regulatory requirement, there is very little experience with the processing of due diligence information. Thus, initially it is planned to allocate about 12 professional and 15 general service staff-months (see also comments on data capture, correspondence/administrative and registration/archives staff in 2.2 above).

Key Performance Indicator: On the assumption that the allocated resources for 1999 could be maintained as indicated above, then the goal to publish Due Diligence information within 1 month from the date of receipt as mentioned in Res49, Annex 1 paragraph 8, might be reached at the end of 1999. This goal would be highly dependent on the timely conclusion of the existing Res. 49 queries, the availability of an automated Res49 publication tool (see paragraph 2.6d, below) and the updating of the SNS database (particularly the accuracy of 2C date information).

2.6 Software development for the processing of space notifications

Software required to process space notices is provided through the services of the Radiocommunication Information System Department (RIS). Activities will be focussed on the improvement of the Bureau's infrastructure to process the notifications and to publish the results of examinations more rapidly. This includes maintenance of the operational software to support production as well as immediate intervention and assistance to the user in case of difficulties.

In 1999, particular emphasis will be put on the items listed below, many of which require extensive input and assistance from the internal user and indicated implementation dates are based on the expectation that such assistance will be provided in a timely manner. About 110 professional staffmonths, will be dedicated to these activities in 1999.

- a) The deployment of the Space Frequency Management System in the client-server environment will be concluded by middle of 1999. While several modules of the system are already available, various additional parts will become available in the course of the 2nd quarter and the complete system should be available at the beginning of the 3rd quarter.
- b) In order to improve the quality of electronic notices submitted by administrations, it is planned to make available enhanced validation software integrated into the already available data capture software. This should be completed for the March issue of the SRS on CD-ROM.
- c) To enable off-site coordination analysis and to assist outside users to undertake such analysis themselves rather than ask for assistance from the Bureau, enhanced tools for pfd calculations and AP29 examinations will be made available for the March issue of the SRS on CD-ROM.
- d) To allow capture, publication and Web access to data related to the application of the "Due Diligence" concept, existing software packages will be appropriately extended and made available by the end of the 1st quarter.
- e) The MSPACE software will be enhanced to interface directly with the SNS-database. This will facilitate the processing of Plan updates and should become available to the user by the end of the 2nd quarter.
- f) To ensure coherence of results of calculation in all technical programs, a single DLL library containing all geometrical routines used will be created and implemented to be used by all space programs by the middle of the year. For the same reason, a single library of routines will be created to calculate all standard antenna patterns to be used in all technical programs by the end of the 4th quarter.

Key Performance Indicator: Delivery of the software to users by the dates indicated.

The foreseen changes of processing from the Siemens mainframe to a client-server environment will imply a period of testing and training of staff concerned in the Space Services Department. Processing tools will have to be adapted to take account of the simplified Radio Regulations that come into force on 01.01.99. A review of the Master Register will also be necessary following the entry into force of the new RR. A number of PC-based "Tools" are being made available to Administrations; which include technical examination packages and validation programs as outlined above.

It is planned to allocate about 2 professional and 1 general service staff months in the Space Services Department (SSD).

2.7 Resolution 4 - Period of validity of GSO assignments

The related activities consist in:

- examining the requests for extension of the period of validity to determine under which "resolves" of the Resolution the request is to be treated;
- identifying cases for which the "validity" has expired or will expire shortly consult the administration;
- consulting with administrations when necessary to clarify validity of data in SSD databases;
- publishing the appropriate special section (RES4/ or AR11/C/...MOD);

• relating this item to changes in 2c-Dates/ensure SNS up-date.

Currently approximately 20 cases need to be processed.

The resources allocated to carry out these activities are about 1 professional and 1 general service staff-month.

Key Performance Indicator: At the end of 1999, corrected data should have been obtained from administrations. Publication of routine requests for extension will be effected within 6 weeks of receipt by SSC.

2.8 Resolution 53 - Updating of the remarks columns of the BSS Plan

Resolves 2 of Resolution 53 instructs the Radiocommunication Bureau to issue a Circular Letter which includes the analyses of compatibility (between the revised Regions 1 and 3 broadcasting-satellite service Plans and other services having allocations in the planned bands in all three Regions and between the revised Regions 1 and 3 Plans and the Region 2 Plans) and the modified "Remarks" column of Article 9A of Appendix S30A and Article 11 of Appendix S30. Resolves 5 of the same Resolution further instructs the Bureau to report the above-mentioned results to WRC-2000.

In order to fulfil the requirement of this resolution, about 2 professional staff-months and a few general service staff resources will be allocated to this work.

2.9 Resolution 73 - Measures to solve the incompatibility between BSS service in Region 1 and the FSS in Region 3

In the 12.2-12.5 GHz band, administrations need to be identified:

- whose assignments in the FSS networks affect the BSS assignments;
- whose assignments in the BSS service affect the Region 3 FSS assignments.

To achieve this it is necessary to:

- apply the criteria of Annex 4 to Appendix 30;
- identify the BSS assignments in the 12.2-12.5 GHz band which are affected by Region 3 FSS networks;
- identify the administrations whose assignments affect BSS assignments;
- apply the criteria of Annex 1 to Appendix 30 and relevant Rules of procedures;
- identify the Region 3 FSS networks in the 12.2-12.5 GHz band which are affected by BSS assignments;
- identify the administrations whose assignments affect Region 3 FSS networks.

Based on the fact that this Resolution is applicable to the FSS and BSS networks for which the information has been received before 27 October 1997, the related workload forecast is estimated as follows:

- In SSC 194 FSS networks, with a date of receipt before 27 October 1997, which have frequency assignments in the given band, have to be examined against 121 BSS networks in the Region 1 Plan, submitted under Article 4 of Appendix 30.
- In SNP Eight networks, modifications to Region 1 Plan, have to be examined against FSS network assignments in Region 3.

Resources allocated to this work are about one professional and one general service staff-month.

2.10 Resolution 532 - Review and possible revision of BSS Plans, IRG/GTE

Resolves 2 of Resolution 532 instructs the Director to present a report on the IRG's studies to WRC 2000 concerning the feasibility of increasing analogue channel capacity in Regions 1 and 3. In order to assist the work of the IRG and the GTE, the Bureau will conduct studies and produce contributions to these meetings. Administrative work to support two meetings of the GTE and three meetings of the IRG is also expected to be required during 1999 in addition to the correspondence with administrations on this issue.

Available resources for these tasks are restricted to 17 professional staff-months and five general service staff-months. Adequate software support is expected to be available. It is to be noted that a decision by the IRG to consolidate studies into a single approach will assist in the effective use of Bureau resources.

2.11 Resolution 533 - Re-publishing of AP30/C/... Special Sections

Related activities comprise the re-examination of the coordination requirements with respect to revised Regions 1 & 3 BSS Plans and the publication in a special section APS30 (RES533)/C/.

Around 400 satellite networks have frequency assignments in the concerned bands and need to be re-examined.

Eight professional and four general service staff-months will be allocated to these activities.

Key Performance Indicator: All satellite networks will be examined and published in 1999.

3 Terrestrial Services

In 1999 notices for terrestrial services will be processed under two different sets of provisions:

- terrestrial notices which are received by 31 December 1998 will be treated under the relevant provisions of Article 12 (and associated procedures);
- notices received after 1 January 1999 will be treated in accordance with the provisions of Simplified Radio Regulations (Articles S9, S11 and S12).

The objectives are:

- to complete, by 31 March 1999, the treatment of all terrestrial notices received by 31 December 1998 (excepting some cases in the bands shared with space services) in accordance with the relevant procedures and to reflect the resultant situation in the March-99 edition of the IFL on CD-ROM;
- to review all internal procedures with a view to adapting the production chain (registry, validation rules, finding documents, finding system) to the requirements of the Simplified Radio Regulations;
- to review the frequency assignments in the Master Register so as to bring the relevant findings into alignment with the provisions of the Simplified Radio Regulations (including the use of the numbering system).

3.1 Coordination requests pertaining to terrestrial services

This activity will comprise the processing of all coordination requests (under S9.21), including the regulatory and technical examinations and the objective is to complete this action within the statutory period. Some 100 requests are expected to be treated (approximately 80 cases for the coordination of broadcasting assignments in the bands shared with other services; approximately 20 cases to other services). 4 professional staff-months will be dedicated to this activity.

Key Performance Indicator: To process all requests within statutory time limits.

3.2 Plan modification procedures for terrestrial services

About 8000 cases under various plan modification procedures (AP S25, AP S26, ST61, GE75, RJ81, GE84, GE85MM, GE85EMA, GE89, RJ88) will require treatment in 1999. The treatment of these notices will comprise the following principal activities:

- data input (manual, electronic);
- data verification, writing correspondence, data correction;
- archiving (electronic, paper);
- maintenance of validation rules;
- running and monitoring results of computer batch programs;
- examination (regulatory and technical);
- publication;
- monitoring of the procedure;
- review of the published assignments;
- recording of the assignments;
- review of the recorded assignments. Table 1 shows the estimated number of notices foreseen in 1999.

TABLE 1

Estimated number of frequency assignments/allotments for Plan modification procedures

Plan	AP S25	AP S26	ST61	GE75	RJ81	GE84	GE89	GE85
No. of notices	30	20	3600	150	200	3500	400	50

About 35 professional and 20 general service staff-months will be dedicated to these activities.

Key Performance Indicator: To carry out the entire procedure (from the receipt of the notice until the publication in the relevant Special Section) within a period of three months following the receipt of complete notices.

3.3 Notification, examination, recording and other regulatory procedures pertaining to terrestrial services

The same workload as in past years is expected, with a slight increase of the number of terrestrial notifications in the bands shared with the space services. Some 50 000 notices might be received in 1999, under the notification procedure of Article S11. Each notice will be processed (i.e. reception, registering, validation, correspondence, data correction and publication in the Weekly Circular) within the regulatory period allowed. All these notices will also be examined under the relevant provisions of Article S11 of the Radio Regulations (conformity with the Table of frequency allocations and other provisions of the Radio Regulations, and, where appropriate, from the viewpoint of their conformity with the coordination procedures or with a frequency allotment or assignment Plan and/or to other provisions of the Agreement, when applicable).

About 90 professional and 120 general service staff-months will be dedicated to these activities in 1999

Key Performance Indicator: Complete processing of each notice within the statutory time limit. Some delays are however expected in the bands shared with space services, where such examination depends on the status of examination of notices to space services.

The processing and the technical examination of notices to the broadcasting service in the high frequency bands will be governed, as from 1 January 1999, by the procedures of the new Article S12 of the Radio Regulations.

This processing, which deals with 40 000 notices per year, is carried out on a weekly basis resulting in the publication, every month, of the Tentative Schedule on CD-ROM. The Bureau completed all necessary actions concerning the timely implementation of the new procedure in accordance with the decisions of WRC-97.

About 30 professional and 10 general service staff-months will be dedicated to these activities.

Key Performance Indicator: Complete processing of notices within statutory time limits.

The Bureau will continue to apply other regulatory procedures described in various Resolutions and Recommendations, which will generate a workload comparable to that of the previous years (e.g., some 50 cases in the bands governed by Resolution 300, approximately 30 cases in the bands governed by Recommendation 402). The Bureau will also continue to make available, on the ITU Web site, the monitoring reports submitted by administrations.

Approximately 3 professional staff-months will be dedicated to these activities.

Key Performance Indicator: No complaints from Member States on services provided.

3.4 Application of administrative and operational procedures

The Bureau will continue to provide assistance to administrations in the application of administrative and operational procedures which constitute a significant part of the Radio Regulations.

In 1999, about 200 requests dealing with the allocation of series of call signs, blocks of selective call numbers and Maritime Identification Digits (MID) may need to be handled in accordance with Article S19, Resolution 13 (Rev. WRC-97), as well as ITU-R and ITU-T Recommendations. The Bureau will continue to monitor the status of the MMSI resource, as requested by Resolution 344(WRC-97), so as to propose appropriate remedial action before the resources are exhausted. Other requests under Articles S47 and S48 (30 cases), Resolution 331 (10 cases), and Article S25 (10 cases) are also foreseen.

The Bureau will also review the provisions of the Radio Regulations containing references to ITU-R or ITU-T Recommendations, as requested by Resolution 27(Rev.WRC-97).

About three professional and eight general service staff-months will be dedicated to these activities.

Key Performance Indicator: No complaints from Member States on services provided.

3.5 Implementation of Conference Resolutions

In addition to the actions relating to the entry into application, as from 1 January 1999, of the Simplified Radio Regulations (e.g., reformatting of the Master Register so as to conform with the numbering system of the Simplified RR, completion of the activities related to Resolutions 8 and 412 (WARC-92), etc.) the Bureau will act in response to several Resolutions, such as:

- Resolution 29 (WRC-97), instructing the Bureau to consult Administrations concerning the use of the WARC-92 extension bands and to present a report to CPM, in 1999.
- Resolution 30 (WRC-97), instructing the Bureau to introduce CD-ROM formats for the publication of the Weekly Circular, including the Special Sections.
- Resolution 340 (WRC-97), instructing the Bureau to reformat its database on maritime mobile service, so as to include additional information required for the operation of the Global Maritime Distress and Safety System, which will be fully implemented on 1 February 1999.
- Resolution 535 (WRC-97), dealing with the development of Rules of Procedures and of the appropriate software in the context of the HFBC, as well as with the role of the Bureau to coordinating the requirements submitted by Administrations requesting it (in the context of Article S12).
- Resolution 537(WRC-97), requesting the Bureau to conduct, as a matter of urgency, the first survey of transmitter and receiver statistics called for in Resolution 517.

The workload related to these activities, which will be completed in 1999, will be covered by the resources referred to elsewhere.

3.6 Software development for processing of terrestrial notifications

Software required to process terrestrial notifications is provided through the services of the Radiocommunication Information Systems Department (RIS). To this end, the software in production must be maintained, although the main objective for 1999 is to implement as much as possible of the new terrestrial application software TerRaSys that will replace the existing FMS. The achievement of the objectives listed below will heavily depend on the timely definition of all user requirements and adequate user support in testing the software developed. The following specific software development activities are planned, for which about 55 professional staff-months, will be dedicated:

- a) The conversion of all data from FMS to TerRaSys will be finalised by the end of the 2nd quarter. This will also enable the BR to publish the terrestrial CD-ROM in its entirety.
- b) The FM/TV portion of TerRaSys will be ready to be put into production at the beginning of the 2nd quarter. This will be a major step in the move from FMS to TerRaSys.
- c) The beta version of a package allowing electronic submission of LF/MF notification data (an extension to the existing program for FM/TV) will be distributed to administrations by the end of the 3rd quarter. By the same target date, a package to allow LF/MF data capture inside the BR should be available for beta testing. A respective circular letter to announce the draft electronic format to administrations will be dispatched by the end of the 2nd quarter.
- d) The beta version of the WIC on CD-ROM, extended to cover all terrestrial services, should be dispatched to administrations before the end of the 3rd quarter.

Key Performance Indicator: Delivery of the software to users by the dates indicated.

4 Study Groups and related activities

The following overall staff resources have been allotted to the tasks indicated, which include those for the ITU-R Study Groups, the intersector activities and related conference preparatory work:

- 70 professional staff-months (P/D);
- 100 general service staff-months.

4.1 Support for regular activities of ITU-R Study Groups

Organization of the Study Groups (see Table 1):

TABLE 1

Organization of the ITU-R Study Groups

Study Group	1	3	4	7	8	9	10	11
Assigned Questions	33	24	51	48	70	56	36	81
Working Parties	3	4	3	4	3	4	3	3
Task Groups	2				1			1
Joint Working Parties						1	3	3
Joint Task Groups			1				1	1
Joint Rapporteurs Groups				1	1	3		1

Expected results

At meetings other than those of Study Groups (see Table 2-1):

- finalisation of preliminary draft Recommendations and other texts prepared during 1998 and annexed to the respective chairmens' reports;
- preparation of new or revised draft Recommendations and other texts;
- servicing of liaison statements from other groups.

TABLE 2-1

Expected Results in 1999 at meetings other than those of Study Groups

Study Group	1	3	4	7	8	9	10	11
Draft Recommendations	4	16	9	16	17	19	7	14
Other texts						17	5	3
Additional draft Recs. (estimated)	6	5	2	4	13	4	8	9
Additional other texts (estimated)	1	3	1	2	6	1	1	1
Liaison statements (estimated)	30	12	60	45	60	30	35	40

At the Study Group meetings (see Table 2-2):

- consideration of draft Recommendations and other texts for adoption at the meeting and their subsequent approval;
- consideration of draft Recommendations for adoption by correspondence and subsequent approval;
- handbooks progress review and examination of other texts;
- establishment and organization of future work programme.

TABLE 2-2

Expected Results in 1999 at Study Group meetings

Study Group	1	3	4	7	8	9	10	11
Finalized Draft Recs. (adoption at meeting)	3	10	10	10	9			5
Other texts (estimated) (approval at meeting)	1	3			4		5	4
Additional draft Recs. (estimated) (adoption by correspondence)	10	21	11	17	4	23*	15	23
Additional other texts considered		3	1				3	1

^{*} These Recommendations will be sent directly to RA-2000 by the Study Group Chairman according to 10.1.3 of Resolution ITU-R 1-1.

Organization

• Provide administrative and technical support for preparation, running and follow-up of meetings.

Documentation

- Processing of input, temporary and output documents, Circulars, publication master copies, etc.
- Electronic posting of documents.
- Establishment of e-mail reflectors and WWW pages.
- Preparation of Supplement fascicles.

Management

- Manage procedures leading to the approval, by correspondence, of Recommendations and Questions, giving advice to the respective Chairmen (see Table 3-1).
- coordinate studies between meetings (e.g. through correspondence groups, etc.) and advise on future planning, in particular with respect to the CPM-99.
- Assist the SG Chairman to define workplan and SG budget management
- assist the SG, WPs, TGs Chairmen to prepare Chairman's report (see Table 3-2), to the extent necessary.

TABLE 3-1

Expected Recommendations to be approved by correspondence in 1999

Study Group	1	3	4	7	8	9	10	11
No. of Recs. to be approved by correspondence (estimated)	7	31	21	12	13	21	15	28

TABLE 3-2
Assistance in preparation of Chairman Reports

Study Group	1	3	4	7	8	9	10	11
No. of pages of Chairman Reports (estimate)	600	350	1000	300	1500	800	450	800

- No. of Circular-Letters and other administrative documents: 200 for a total of 2200 pages (estimate)
- Additional workload forecast per Study Group

TABLE 4
Workload Forecast per Study Group

Study Group	1	3	4	7	8	9	10	11
Document pages to be processed	4000	2800	11000	3000	10000	4000	4600	6500
Documents to be electronically posted	400	450	600	350	900	450	230	400
Supplements to Volumes pages to be processed	150	1200	600	450	350	400	600	2200

Allocated resources

TABLE 5

Allocated resources

Study Group	1	3	4	7	8	9	10	11
Budget (CHF x 1000)	169	209	85	140	240	40	126	259
WP, TG etc. meeting days	(37)	28	33(9)	31	56(30)	30	34(15)	44(5)
SG meeting days	(2)	2	3	3	3		3	3
Professional staff months	3	6	6	3	8	6	4	6
General service staff months	10	5	10	5	20	10	5	15

NOTE: Figures shown include no. of days of meetings outside Geneva indicated in parenthesis

KPI(s) and expected value at the end of the period

- Satisfaction of SG participants as to: meeting organization, information and documentation availability, quality and accessibility of final output material.
- Work programme and Recommendation production achieved with allocated staff and within allocated budget in the specific time frame.
- 85% of all contributions posted electronically within 24 hrs.

4.2 Special Committee on Regulatory/Procedural Matters

Expected results

At the meeting of the Special Committee (July 1999):

• Finalization of the Report of the Special Committee to CPM-99.

Organization

• Provide administrative and technical support for preparation, running and follow-up of the meeting.

Documentation

- Processing of input documents and relevant Circulars.
- Electronic posting of documents.

Management

• Assist the SC Chairman to define workplan and manage respective budget.

- 400 document pages to be processed.
- 40 documents to be electronically posted.

Allocated resources

One professional and 4 general service staff-months.

KPI(s) and expected value at the end of the period:

- Satisfaction of SC participants as to: meeting organization, information and documentation availability, quality and accessibility of final output material.
- Expected results achieved with allocated staff and within allocated budget in the specific time-frame.
- 85% of all contributions posted electronically within 24 hrs.

4.3 Support to Conference Preparatory Meeting (CPM-99)

According to Resolution ITU-R 2-2, the CPM is responsible for the ITU-R preparation of the World and Regional Radiocommunication Conferences. In 1999, the 2nd session of the CPM, on the basis of contributions from Member States and Sector Members, the Special Committee, the Radiocommunication Study Groups, and other sources, shall prepare the CPM Report to WRC-2000.

Expected results

Timely availability of the CPM Report to WRC-2000 (final version) for the participants at the 2nd session of the CPM and as input Document to WRC-2000.

Organization

• Provide administrative and technical support for preparation, running and follow-up of meetings.

Documentation

- Processing of the texts for the Chapters 1-7 prepared by the relevant SGs/TGs/WPs and the SC.
- Assistance in preparation of a Draft CPM Report to WRC-2000 (in English).
- Distribution of a Draft CPM Report to WRC-2000 to the CPM participants.
- Processing of input, temporary and output documents, etc.
- Electronic posting of the available documents.
- Preparation of the final text.

Management

- Manage procedures leading to the approval of the CPM Report to WRC-2000, giving advice to the CPM Chairman.
- Coordinate studies between meetings (e.g. through correspondence groups, etc.).
- Cooperate with CPM Chairman and Chapter Rapporteurs to define workplan and budget management.

- 4000 document pages to be processed (estimated).
- 200 documents to be electronically posted (estimated).

Meeting days

- Five for preparation of a draft CPM Report in English.
- Ten for the second session of the CPM.

Allocated resources

Eight professional and ten general service staff-months

KPI(s) and expected value at the end of the period:

- Satisfaction of CPM participants as to: meeting organization, information and documentation availability, quality and accessibility of final output material.
- Processing of the texts for the Chapters 1-7 prepared by the relevant SGs/TGs/WPs, etc. by 31 May 1999 and the SC by 5 September 1999.
- Preparation of a Draft CPM Report to WRC-2000 (in English) by 5 June 1999.
- Circulation of a Draft CPM Report to WRC-2000 to the participants by 15 September 1999.
- Availability of the CPM Report to WRC-2000 in E, F, S by 26 November 1999.

4.4 Support for Radiocommunication Assembly RA-2000

Expected results

At the Study Group meetings:

• Adoption of draft Recommendations and other texts prepared during 1998 for submission to RA-2000

At the Working Party meetings:

• Final agreement on draft Recommendations regarding CPM-99 issues for submission to RA-2000 by the Study Group Chairman, according to §10.1.3 of Resolution ITU-R 1-2.

Organization

 Provide administrative and technical support for preparation, running and follow-up of RA-2000.

Documentation

- Processing of input documents (pink and white) and relevant Circulars.
- Electronic posting of documents.
- Preparation of revised RA texts following decisions of previous RA, WRCs and PP-98.

Management

- Manage procedures leading to the approval of Resolutions, Recommendations, Questions and Opinions giving advice to the respective Chairmen.
- Assist the SG Chairmen to prepare reports to RA-2000.

- 250 document pages to be processed.
- 25 documents to be electronically posted.

Allocated resources

One professional and 0.5 general service staff-months.

KPI(s) and expected value at the end of the period

- Expected results achieved with allocated staff and within allocated budget in the specific time-frame
- 85% of all contributions posted electronically within 24 hrs.

4.5 Support for Study Group Chairmen and Vice-Chairmen meeting

Expected results

At the meeting of Study Group Chairmen:

- definition of the Study Group workplan taking into account WRC-2000 requirements;
- finalization of meeting schedule for forthcoming months.

Organization

 Provide administrative and technical support for preparation, running and follow-up of the meeting.

Documentation

- Processing of input documents and relevant Circulars.
- Electronic posting of documents.
- Preparation of detailed draft block meeting schedule(s).

Management

- Assist the SG chairmen to define respective Study Group workplan.
- Assist the SG Chairmen to manage respective Study Group budget.

Workload forecast

- 150 document pages to be processed.
- 15 documents to be electronically posted.

Allocated resources

1.5 professional and 0.5 general service staff-months.

KPI(s) and expected value at the end of the period:

- Expected results achieved with allocated staff and within allocated budget in the specific time frame.
- 85% of all contributions posted electronically within 24 hrs.

4.6 Assistance to third Parties in the domain of the Study Group mandate

Expected results

- Customer satisfaction.
- Enhanced ITU-R Study Group image.
- Promote dissemination and use of ITU-R texts.

Short description of the related activities

Provide technical and administrative assistance on areas covered by Study Group work to requesting ITU membership and other parties by phone, fax, e-mail etc., or during visits to BR headquarters.

Allocated resources

Four professional and five general service staff-months.

5 Radio Regulations Board

5.1 Meetings of the RRB

The new 12 member Radio Regulations Board will meet four times in 1999. Input to the meetings will be prepared by the Secretariat in the form of reports and draft Rules of Procedure. Each meeting is supported by the Director in his function as Executive Secretary and by the staff of the Bureau as required.

5.2 Rules of procedures review of findings, special studies

The RRB at its 14th meeting Geneva, 30 November-8 December 1998 approved the consolidated revised Rules of procedure applicable to the provisions of the entire new Radio Regulations, as appropriate. The expected workload for this item in 1999 depends, on the one hand, upon the difficulty that the Bureau will be faced with in application of the provisions of the new Radio Regulations for which new Rules may be required and, on the other hand, on the number and scope of comments that might be received by the Bureau from administrations.

An estimate of three professional and one general service staff-months may be required if the comments are limited to 10% to 15% of the approved Rules.

6 Radiocommunication Advisory Group

The RAG will meet in February 1999 to review relevant results of PP-98 and take action as required, organize the necessary follow-up and review once more the priorities and strategies for ITU-R activities for the forthcoming year, as well as the first version of the draft 2000/2001 budget to be considered by the 1999 Council. Effective coordination of activities among the advisory bodies of the three Sectors will be ongoing. The Bureau will support the work of the RAG through the submission of documents such as this operational plan and by providing administrative assistance. It is expected that the advice provided by the RAG to the Director will contribute to enhance services to Member States and Sector Members.

An estimate of two professional and one general service staff months may be required for the preparation of, assistance in and follow up of one RAG meeting per year.

7 Radiocommunication Bureau Seminars and Conference preparation

7.1 Radiocommunication Bureau seminars

The Bureau will organize the following four regional seminars in 1999:

- Region 2.
- Countries of the Regional Commonwealth in the field of Communications (RCC).
- Broadcasting in Africa.

• Arab countries.

Some 30 documents will be produced in the languages required.

These activities will mobilize about 18 professional and three general service staff-months in 1999.

Key Performance Indicator: 100% of the seminar documents will be prepared and printed inhouse 3 weeks before a given seminar.

7.2 Regional information meetings for conference preparation (Resolution 72 (WRC-97))

Detailed planning will be developed later in the year once the CPM Report is available.

8 Development of BR publications

8.1 Regulatory publications (including publication of service documents)

The following publications resulting from the application of the Radio Regulations are foreseen in 1999:

- Weekly Circulars on paper, microfiche, diskette and, for testing, on CD-ROM;
- two CD-ROMs containing updated versions of the IFL;
- two CD-ROMs with data of Space Radiocommunication Systems (SRS);
- one edition and 1 update to the Preface to the IFL;
- one CD-ROM containing all Terrestrial Plans.

The following service documents, as described in the Radio Regulations, will be published in 1999:

- List IV (Coast stations): two supplements (approximately 250 pages);
- List V (Ship stations): one full edition (3 000 pages) and three supplements (500 pages);
- List VI (Radiodetermination and special service stations): two supplements (280 pages);
- List VIIA (Call signs and numerical identities used by the maritime services): one full edition (2 000 pages) and three supplements (450 pages);
- List VIIB (Other call signs): one full edition (400 pages) and one supplement (50 pages).

Consideration will be given to the publication of these service documents on CD-ROM. About 13 professional and 60 general service staff-months will be dedicated to these activities in 1999.

Key Performance Indicator: timely publication and positive reaction from users.

8.2 Editing and publication of texts resulting from other activities in the ITU-R Sector

A deluxe edition of the CD-ROM of the Radio Regulations will be published in the third quarter of 1999. This edition will include a comprehensive index and extensive linking and search facilities.

The 1998 edition of the Rules of Procedure will be published in the first quarter of 1999 (approximately 200 pages/language), in a loose-leaf format, with appropriate updates as approved by the RRB. They will also be available on CD-ROM and through the Electronic Bookshop/Online services.

TSD will coordinate the publication of all ITU-R Recommendations approved by correspondence during the year (approximately 17 Supplements). An updated version of the CD-ROM of ITU-R Recommendations will be published in the second quarter of 1999. All Recommendations will be made available electronically through the Online and Electronic Bookshop services. The List of ITU-R Recommendations in force (approximately 50 pages/language) will be published in the second quarter of 1999. This list will be kept updated on the ITU web site.

The 1999 Series of ITU-R Reports will be published progressively throughout 1999 (approximately 500 pages/language expected). These Reports will also be made available online.

Various handbooks will be published throughout 1999, depending on Study Group Department priorities (approximately 1 600 pages/language expected).

In 1999, a new edition of the Maritime manual will be published reflecting the new Administrative regulations in force (approximately 600 pages/language).

About 20 professional and 53 general service staff-months will be dedicated to these activities in 1999.

Key Performance Indicator: user satisfaction.

9 Assistance to Members

As it was the case in previous years, the Bureau will continue to provide various kinds of assistance to administrations in the year 1999. About 2% of the Bureau resources will be dedicated to the assistance cases as listed below

9.1 Specific assistance to administrations of developing countries

In 1999, the Bureau will continue to provide assistance to the administrations of developing countries in the following areas:

- in supporting the activities of the national spectrum management units; having in mind the changes in the regulatory structures in many countries;
- in participating in regional coordination groups, as requested by Article S12, including joint meeting of representatives of these regional coordination groups;
- in providing assistance in frequency selection.

9.2 Treatment of cases of harmful interference

The treatment of cases of harmful interference is a special case of assistance which is defined in the Radio Regulations. Owing to the nature of some services dealing with safety of life, the Bureau's objectives is to process these cases within 48 hours. The Bureau anticipates dealing with approximately 60 such cases in 1999.

9.3 Special assistance on coordination, notification and plan modification procedures

Article S13 of the Radio Regulations specifies a wide range of possibilities for assisting the administrations when they have difficulties in applying the procedures of Articles S9 and S11 and Appendices S30, S30A and S30B. Similar provisions exist in the context of the procedures of Article S12, Appendices S25 and S26, as well as in various Regional Agreements.

The Bureau provides assistance during bilateral space systems coordination meetings, as well as assistance in space matters in the form of meetings and training missions.

The Bureau anticipates dealing with approximately 200 such cases in 1999.

The Bureau's assistance is provided to administrations for coordination of frequency assignments to earth stations operating with GSO or NGSO satellite(s), with respect to the terrestrial services of other administrations. This activity requires the following tasks:

- identification of the nature of the assistance (no reply, no decision, disagreement or any other reason);
- completeness check of Appendix S4 data;
- technical examinations to identify the administrations with which the coordination is required;
- preparation and sending of the correspondences.

The total number of coordination assistance cases expected in 1999 is 56. This number is composed of 26 existing cases not yet completed at the end of 1998 and 30 new cases forecast in 1999.

Resources allocated to these activities in 1999 will be about 5 professional and 4 general service staff-months

Key Performance Indicator: All requests for assistance must be addressed immediately and followed up in a timely fashion. The number of carry-over cases is expected to be reduced.

9.4 Assistance to non-Sector Members

Assistance and clarification concerning regulatory and administrative provisions of the Radio Regulations are requested, on a daily basis, by many operating agencies, private companies and the general public. The Bureau will try to reply to these requests to the extent that they do not significantly impede the overall priorities of this Operational Plan.

10 Cooperation

10.1 Cooperation with ITU-D

Expected results

- Limit the risk of duplicating studies between ITU-R and ITU-D.
- Keep ITU-R and BR up-to-date on development issues which, in turn, helps planning of work programmes.

Short description of the related activities:

Liaison will be maintained between BR and the BDT in areas of common interest between the two Sectors, with particular emphasis on ITU-D Questions covering:

- on-going studies in the R Sector of particular interest to developing countries;
- digital broadcasting technologies;
- handbooks;
- economic aspects of spectrum management.

The Bureau will cooperate in the study of Questions assigned to the ITU-D Study Groups in the Valetta Action Plan. It will also collaborate to consider and implement effective means to support the developing countries in the generation of a report on current and foreseen uses of radio spectrum.

Workload forecast

BR will:

- attend meetings of ITU-D Study Groups, Rapporteur Groups and TDAB;
- ensure appropriate liaison between ITU-D and relevant ITU-R groups;
- where requested, provide advice and assistance to countries on issues such as propagation and spectrum management;

Allocated resources

Two professional staff-months.

KPI(s) and expected value at the end of the period

Benefit and satisfaction to developing countries resulting from involvement of ITU-R in relevant studies

10.2 Cooperation with ITU-T

Expected results

- Limit the risk of duplicating studies between ITU-R and ITU-T.
- Keep compatibility of ITU-R and ITU-T Recommendations on public network requirements (i.e. SDH and ATM issues, performance and availability objective).
- Keep ITU-R and BR up-to-date on common issues in order to help planning of work programmes.

Short description of the related activities

Liaison will be maintained between BR and the TSB in areas of common interest between the two Sectors, with particular emphasis on:

- on-going studies in the R Sector on: mobile telephony, digital broadcasting technologies, fixed satellite and terrestrial services, wireless access applications, etc. Particular Intersector Coordination Groups (ICG) are operational on the subjects related to satellite matters and IMT-2000. Further specific coordination of work is ensured between ITU-R Study Groups 10 and 11 and ITU-T Study Groups 9, 12 and 16;
- common policy on IPR issues.

Workload forecast

BR will:

- attend meetings of TSAG;
- where requested, ensure appropriate liaison between ITU-T and relevant ITU-R groups.

Allocated resources

Two professional staff-months.

10.3 Cooperation between advisory bodies

Regular contacts between the managing officers of the advisory bodies of the three Sectors are maintained to ensure efficient coordination. The Bureau's involvement, if any, in activities related to regional presence will be determined after the 1999 Council.

10.4 Cooperation with International and Regional Organizations

Expected results

- Promote dialogue amongst bodies having common interests.
- Help coordination, leading to more effective preparation for events such as WRCs.
- Keep ITU-R abreast of relevant activities in other organizations to help planning of work programmes.
- Limit the risk of duplicating studies between ITU-R and other International Organizations.

Short description of the related activities

Liaison and cooperation will be continued between BR and:

- UN Committee on the Peaceful Uses of Outer Space (UN-COPUOS).
- IMO, Inmarsat, Cospas-Sarsat, CICR and ICAO with regard to the application of ITU treaty texts.
- CEPT, CITEL, APT, WMO, PATU, etc., particularly with a view to ensuring effective preparation for WRC-2000.
- EBU, ABU, ASBU, WBU, IEC, ISO, ETSI, RCC, etc.
- URSI activities, RAST and COST Projects of relevance to ITU-R studies.

Workload forecast

BR will:

- attend relevant meetings providing reports on ITU activity;
- participate in associated Seminars giving lectures where requested.

Allocated resources

Two professional staff-months.

11 Internal BR services

11.1 Computer Support

Maintenance of the operational computer systems supporting the processing of terrestrial and space notifications will be provided as required. The transfer to the new client/server environment in the space domain will be completed in the planning period. Consequently, the maintenance effort will be comparatively small in the space domain and more effort will be deployed to further enhance the systems with a view to increase productivity and reduce the backlog. The transfer from the old FMS to the new terrestrial TerRaSys can only start in 1999. Consequently, some effort still has to be deployed to maintain the old system in production.

Continuous hardware upgrades will be provided to all BR users as well as software packages upgrades to keep the working environment at the highest level. The BR specific servers will be maintained and technical assistance provided to the BR users in setting up new software packages and in using them will continue. Resources planning will, as well, continue in close co-operation with the IS Department.

Efforts will be made to conclude the introduction of a computerised system to support the mail registry. It is a first application of the Documentum system which is planned to manage the production of all documents ITU-wide. While the latter project is pursued by the IS Department, the adaptation of the same Documentum package for the computerised BR mail system has been managed in the BR.

Considerable effort will again be made to keep the ITU-R section of the Web pages of the ITU user friendly and up-to-date. A substantial ITU-wide review of experiences outside ITU will be finished in early 1999, conclusions drawn and necessary adaptations implemented.

About 45 professional and 10 general service staff-months will be dedicated to all of these activities.

Key Performance Indicator: Functional soft/hardware and user satisfaction.

11.2 General support

The support to BR activities consists in:

- Supporting ITU-R meetings by in insuring that appropriate facilities be provided to the members for the successful implementation of all the meetings of the Radiocommunication Sector.
- Supporting Web/EDH by providing the members participating in the work of the Radiocommunication sector with efficient on-line electronic document handling facilities as well as creating/maintaining BR on-line services through related Web pages.
- Supporting communications by managing and archiving incoming and outgoing BR mail of all sorts; surface mail, Fax, E-mail, in order to assure that incoming correspondences reach the concerned person in the BR in very short delays and that outgoing mail be accurately registered for easy retrieval.
- Assisting the Director in the internal management of the BR by; Planning and preparing the
 ITU-R draft biennial budget to be incorporated into the ITU draft biennial budget for submission
 to the Council Checking and following up all expenditures of the Radiocommunication Sector
 versus available budget and Report as appropriate to concerned ITU-R bodies (CVC, RAG,
 RA/WRC,..) Planning and following up the use of human resources in the BR versus post and
 financial resources and other administrative tasks as appropriate.

Human resources dedicated to these tasks will be of about 10 professional and 90 general service staff-months in 1999.

12 Recapitulation of Resources

12.1 Budget resources in 1999 (estimates)

Direct costs CHF x 1000	Budget 1998-1999	Expenditures estimates as at 31.12.98	Balance estimates as at 31.12.98
RA & WRC	-		
Seminars	517	303	214
RRB	717	328	389
RAG	226	61	165
Study Groups	3,027	1, 370	1,657
BR	54,321	25, 210	29,111
Publications	4,127	1,580	2,546
Total direct	62,935	28,852	34,083

Invoiced costs CHF x 1000	Budget 1998-1999	Expenditures estimates as at 31.12.98	Balance estimates as at 31.12.98
RA & WRC	-		
Seminars	80	143	-63
RRB	60	43	17
RAG	109	45	64
Study Groups	4,194	1,781	2,413
BR	1,033	300	733
Publications	5,918	960	4,958
Total invoiced	11,394	3,272	8,122
Total	74,329	32,124	42,205

12.2 Recapitulation of BR human resources distribution

	P/D-staff	G-staff
<u>ACTIVITIES</u>	staff-months	staff-months
Space services	269	149
Terrestrial services	187	148
Study Groups	58	100
Radio Regulations Board	3	1
Radiocommunication Advisory Group	0	0
Seminars	18	3
Development of publications	33	113
Assistance to Members	10	8
Cooperation	6	0
BR internal services	55	100
Non-distributed tasks	112	289
Vacant posts & recruitment delays	110	160
Total	860	1,070

Based on past experience, about 210 staff-months will be spent on normal annual leave and about 65 staff-months will be consumed by sick leave. Roughly 45 staff-months are planned to be spent on in-service training.

12.3 General management

Regular meetings of the Radiocommunication Management Committee (RMC) will be held, at least once a fortnight, complemented by departmental coordination meetings as required.